

In the specification

Please amend the following paragraphs

(Page 7, second paragraph,)

Important details of this embodiment are revealed by Fig. 2. Here is shown an enlarged view of the drum 10, gap 42, glass structure 26 at the transfer point, nominally at 6 o'clock. The drum 10 is wet with liquid toner ~~45~~ 50 and ~~residual diluent~~ excess liquid 51 coming into the nip formed by drum 10 and glass 26. The glass is pre-wetted with clear diluent to ensure that the gap between drum and glass is filled with liquid. Metering of liquid on the drum and the pre-wetting liquid on the glass is not very precise so a wave of excessive liquid 44 builds up in the input to the nip. This is referred to, herein, as the Tsunami effect. The toner on the drum before transfer 50 needs to transfer to the glass in a location of low turbulence, about 6 o'clock.

(Page 8, last paragraph -page 9,)

The electrostatic printing plate is shown in Fig. 3a is a photopolymer layer 52 bonded to an electrically grounded substrate 54. A photopolymer layer 52 is heat and pressure laminated to a grounded substrate, typically an aluminized polyester film (PET). It is then exposed through a contact photo tool to actinic radiation ~~60~~ 65 (350nm to 440nm wavelength) to cross link the exposed areas 53. In Fig. 3b the plate is charged by a corona unit 56. The cross linked areas are much higher in electrical resistivity than normal photopolymer so they store charge for significant periods of time. After a suitable delay to allow the normal photopolymer to discharge 55, we have a latent image 62 on the printing plate as in Fig. 3c. In Fig. 3d a "reversal" development is effected with a liquid toner 58, i.e. development of the discharged areas of the plate (those referred to as normal photopolymer or not cross linked). Note the process can be a "normal" image, where the charged areas are developed or reversed as previously mentioned.

(Page 10, first full paragraph,)

An important feature of this invention is the partial exposure of the photo resist. Data has shown that the photopolymer 52 is exposed in ever increasing thickness of a layer 57 starting at its surface, as shown in Fig. 4a through 4c. Increasingly by longer exposure to actinic radiation ~~60~~ 65 cross-links ever deeper layer of the photo polymer. Therefore if one is using

photopolymer at 38 micron thick but wants to make  $5\mu$  features, one might expose only one quarter ~~third~~ 57a of it in thickness 57 as shown in Fig. 4a ~~Fig. 4b~~. One now has highly resistive image in a "sea" of less resistive background areas. Since we never remove the unexposed background areas (~~an indeed~~ and indeed their presence is a critical element in the success of the process, as discussed next), the partially exposed (or unexposed layers under the image) present no problems. One determines the proper level of exposure for the "partial exposure" condition by a series of increasing exposure levels and measuring the charge voltage in large solid areas.

(Page 15, second full paragraph,)

Figure 9 shows a mechanical schematic of the transfer process and a electrical equivalent circuit which allows one to calculate the voltage division across the three elements (glass 404, gap 410, and printing plate 400) during the transfer process.

(Page 16, first full paragraph,)

Now applying electromagnetic theory to the glass 404/ gap 410 structure initially when a step function of voltage is applied 408 the voltages divide capacities between the elements, glass 404, gap 410, and plate 400. Since the imaged areas of the plate 400 are highly resistive they can be disregarded for short periods of time. Since the glass is thicker than the gap, typically 10 to 100 times, and it's dielectric constant is 5 verses 2.1 of the liquids in the gap, the voltages divided preferentially across the glass with little across the gap. If the conductivity of the gap fluids is higher than the glass this situation will worsen the time and transfer will be inhibited.

(Page 20, first paragraph,)

Fig. 11 shows this embodiment. Chuck 100 carrying electrostatic printing plate 102 is transported on linear bearings 104 by belt drive 106, canted at roughly a  $45^\circ$  angle to the horizontal. At the beginning of the print cycle chuck 100 starts at the top near pulley 108.

Moving at uniform speed it passes corona unit 110 which charges the printing plate, 102 with a uniform electrostatic charge. After a short period of time, the low resistivity areas of the plate will discharge to a negligible charge level; the high resistivity areas of the plate retain the charge to near original levels. **In an alternative, if printing plate 102 is a photo sensitive surface it is exposed in an image wise fashion by an optical means 111, such as an LED/ strip lens assembly or scanned laser beam, after charging by the corona unit 110.**

(Page 20, third paragraph,)

Receiving substrate 130 rests on its chuck 132 which rides on linear drive 134 driven by belts 136 and pulleys 138. It moves right past valve 140 which wets it with a thin layer of clear Isopar diluent. It moves to transfer position 142 **148** and stops. Chuck 100 carrying printing plate 102 rotates approximately 135° counter clock wise to a position in obverse relation to receiving substrate 130. Spacing means not shown, accurately position plate 102 from receiving substrate 130 by a precisely controlled mechanical gap, typically of the order of 50μ to 150μ. A voltage is applied **by a second corona unit 128** to chuck 132 to create a transfer electric field which transfers the toner image on plate 102 to receiving substrate 130.

(Page 21, second full paragraph,)

Fig. 12 shows a cross section of the cathode plate 200 of an AC Plasma Color Display Panel. It consists of a glass back plate **201** ~~200~~ with black glass spacer ribs 202 that optically and electrically isolated image cells from one another. These ribs are typically 100μ high and 30μ to 40μ in nominal width. At the bottom of the “wells” are the address electrode lines of copper 204 or nickel metal. Covering the walls and bottom of the “canyons” is the phosphor 206 that converts the UV radiation from the plasma discharge to visible radiation, RG&B in the case of a color display. Alternate canyons are coated with red, then green then blue phosphor.

(Page 24, last paragraph,)

In the example shown, the mosaics are charged positively so a toner with a positive charge 310 ~~312~~ will develop the non-charged areas as in Fig. 14c. This black toner will produce the intermatrix between the mosaics. After the toner is dried, it may be reflowed by heating if necessary, but there are good reasons to leave it a particulate layer which will hold the unfused toner in place.